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FEDERAL COMMUNICA

OFFICE OF THE SECHETARY

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

COMMENTS BY WPSX-TV. CHANNEL 3

In the matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service

MM Docket No. 87-268

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## SUMMARY

These comments are submitted by the management of WPSX-TV, a noncommercial-educational licensee in Clearfield, PA. which is owned and operated by The Pennsylvania State University.

We are respectfully requesting that the Commission reconsider its plan to equalize the coverage of all ATV stations and in some instances, particularly rural areas, consider replication of the existing NTSC service area for stations in that situation.

We are also asking the commission to back away from their proposal for an "all UHF" television system. Replicating the existing coverage area for Channel 3 with the propagation provided by UHF frequencies would be difficult if not impossible.

### **ARGUMENT**

### I. REPLICATION OF SERVICE

WPSX-TV is located in a very rural region right in the middle of central Pennsylvania. We are a full power (100,000 watts) low band VHF station radiating on channel 3. Our coverage area (grade B, see attached map) is quite large and serves a large portion of the state where cable service is neither practical nor available. The Commission's proposal for a service area of 50 to 55 miles will shrink our existing coverage by a considerable margin (see map). This will leave the outer perimeter of our existing area unserved by any public television service. The area in question is so sparsely populated and spread out that operating another station to serve these areas would be impractical. Some of the population centers could possibly be served with the use of translators but the number required would quickly make the project cost prohibitive.

A large part of the funding for public television comes from contributions from the viewing audience. Several times per year we are obligated to run "on air" fund raising efforts to support the operation of the station. Reducing the coverage area by the amount indicated would considerably decrease the population base upon which to draw this funding. A good portion of our support comes from these outlying areas and the loss incurred would be difficult to offset.

We are therefore asking the commission to reconsider its current plan to equalize the coverage of all ATV stations and replicate the existing NTSC coverage, particularly in rural areas where competition is not a factor.

#### II. MAINTAIN VHF BAND

WPSX-TV has been on the air as channel 3 since 1965. The channel allocation was a "drop-in" which required a modification to the allocations table. UHF channels were and are available in the area for noncommercial/educational licensees but have gone undeveloped largely because of the terrain and sparse population base.

The terrain in central Pennsylvania where Channel 3 is located is largely high plateau with the most of the population centers located down in the river valleys which weave through the area. This being the case, there is considerable "shadowing" of the transmitted signal to much of our viewing audience. Our current VHF channel offers at least some coverage in these valleys because of the ground wave bending capabilities of frequencies in the VHF (particularly low band) spectrum. Moving up to the UHF spectrum would create a reception problem for this large portion of our viewing audience located in the river valleys. The UHF spectrum affords little or no bending capability and will cause the shadowing problems to become more severe. While the digital transmission scheme likely to be employed for ATV would afford some "threshold extension" capabilities, the severe shadowing problem would probably prohibit most receivers from taking advantage of this threshold capability

The Commission stated in its argument for an "all UHF" television service that "use of a single contiguous band would simplify the design of TV receivers and antennas by removing the need for tuning signals in more than one band." The proposed rules for ATV are based on the same 6 MHz bandwidth as is currently used for NTSC

transmissions. Since the technology is already in existence for split band reception, there would be little need to change receiver design to accommodate the existing split band situation.

We therefore contend that it would be better to maintain the existing two-band situation in areas such as those in central Pennsylvania in order to maintain service to those who currently have it.



EXISTING CH-3 (GRADE "8") COVERAGE

